Hilmi Taşkın

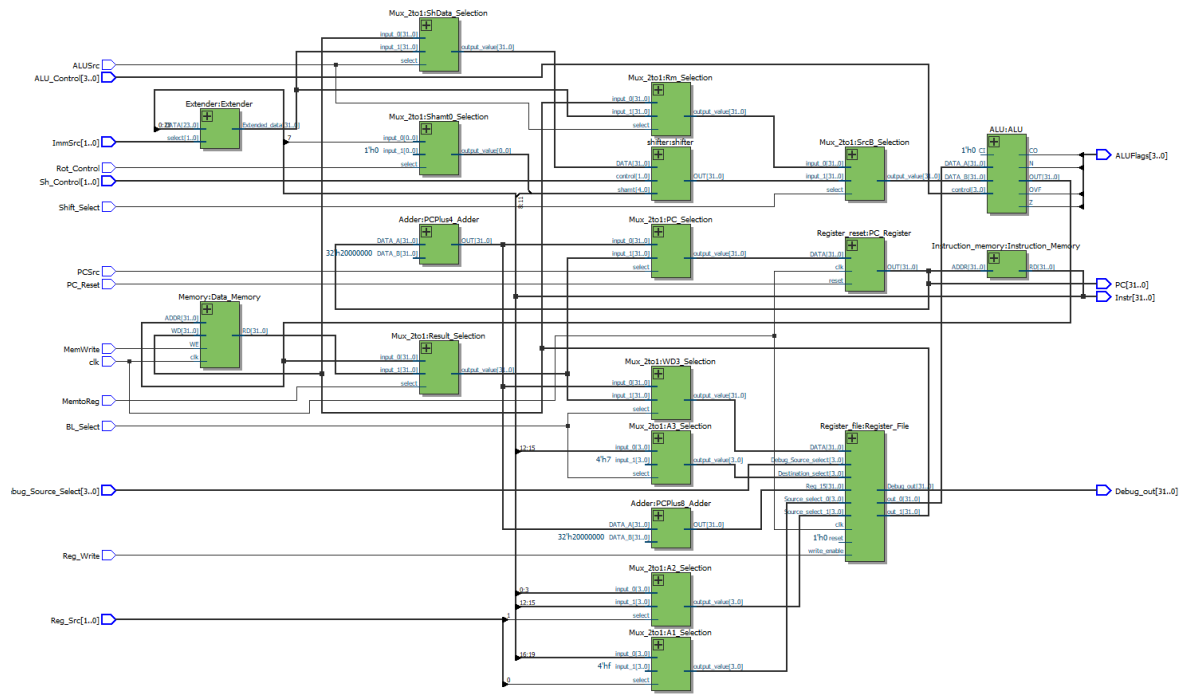# EE446 Experiment 2 Preliminary Work

## 1. Datapath
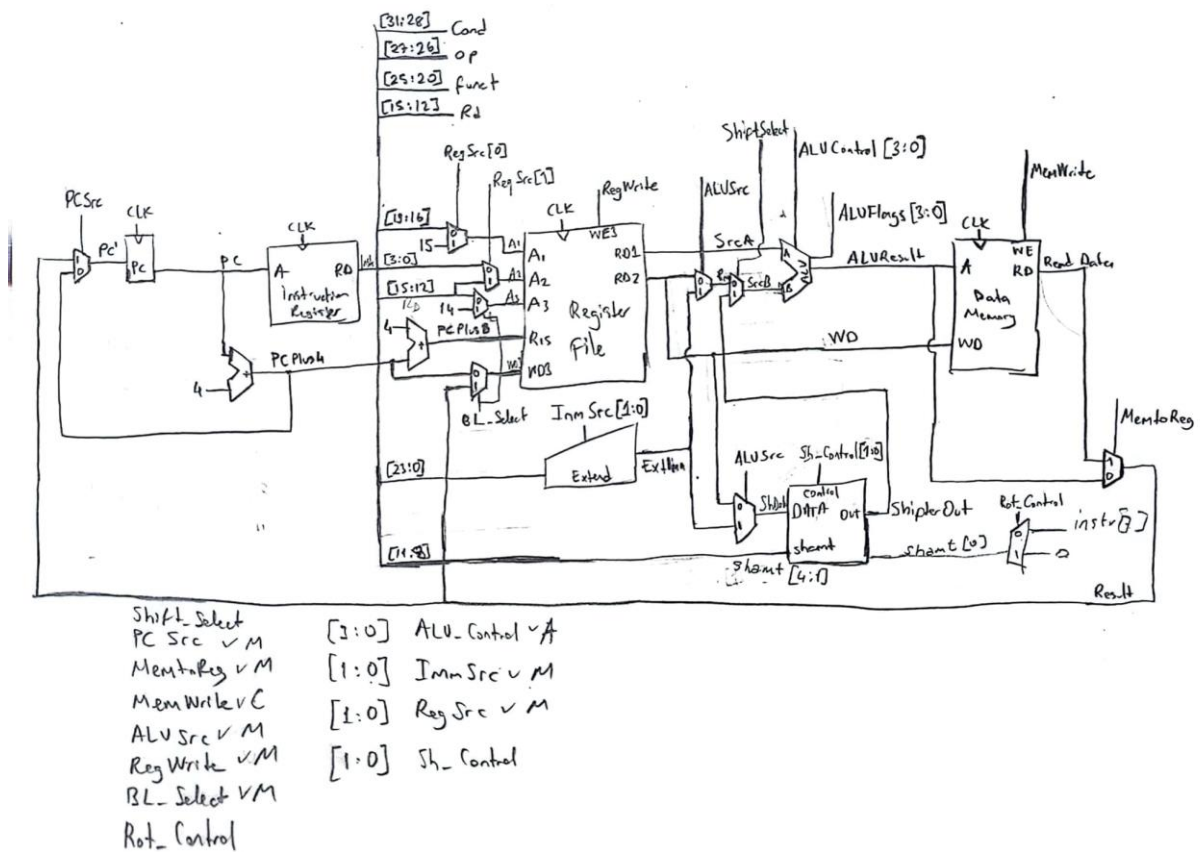


*Figure 1. Datapath RTL View.*

*Figure 2. Extended datapath.*

This is my expanded datapath to cover shifted register operations and BL and BX operations.
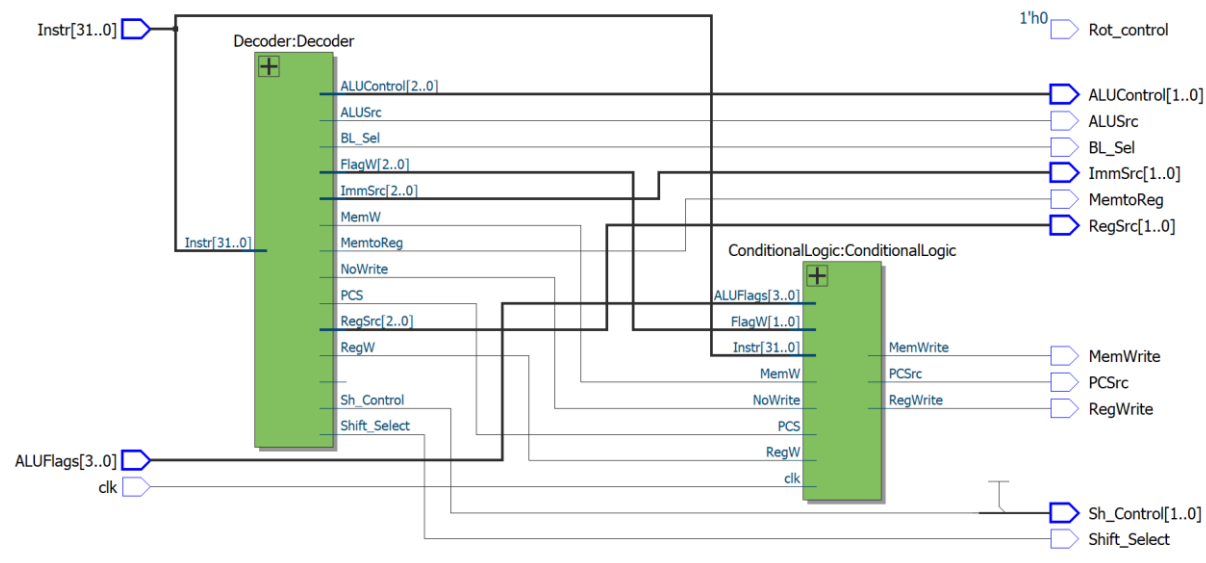
## 2. Controller



*Figure 3. RTL View of controller.*

I added Muxes and a combinational shifter to my datapath and their corresponding control signals are created in the controller.

## 3. Testbench



*Figure 4. Testbench screenshot.*

I tried to run my design in the testbench and I couldn't manage to run the test for a reason I couldn't solve. I don't have enough time to correct it therefore I will try to show it in the laboratory session if I get eligible to attend.